ZORILLA I. GEOFFROY, 1826 (MAMMALIA); PROPOSED SUPPRESSION UNDER THE PLENARY POWERS IN FAVOUR OF *ICTONYX* KAUP, 1835. Z.N.(S.) 758

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HISTORY OF THE CASE

This case stems from the inclusion of Ictonyx Kaup, 1835, in a list of genera, from species of which parasites common to Man have been reported, prepared by Dr. C. W. Stiles in the nineteen-thirties and recommended to be placed on the Official List of Generic Names in Zoology because of their possible public health importance. All the names concerned were ultimately placed on the Official List in Opinion 384 (1956) with the exception of certain names in respect of which certain difficulties had been brought to light. *Ictonyx* Kaup, 1835, was one of these reserved for further consideration (p. 110, par. 25) and allotted the registered number Z.N.(S.) 758.

On page 166 of Opinion 384, paragraph 33, Hemming stated that Viverra zorilla Erxleben, 1777, was the type-species of both Ictonyx Kaup, 1835, and Zorilla Oken, 1816, and for that reason a decision in Opinion 384 on Ictonyx Kaup should be deferred for the present. As pointed out by Dr. Morrison-Scott, in correspondence with the Commission, Hemming was in error since Ictonyx Kaup, 1835 (Das Thierr. 1:352) was based on a single species Ictonyx capensis Kaup. Howell, 1906 (Proc. biol. Soc. Washington 19:46) stated that Kaup's species was identical with Mephitis capensis A. Smith, 1826 (Descript. Cat. S. Afr. Mammals: 20).

Hollister, 1915 (Proc. biol. Soc. Washington 28: 184) was of the opinion that Ictonyx capensis Kaup equals Bradypus striatus Perry, 1810, the name used by Ellerman, Morrison-Scott and Hayman, 1953 (S. Afr. Mammals: 111-112). Allen, 1939 (Checklist of African Mammals: 178) considered that Ictonyx capensis Kaup was the same as Viverra zorilla Erxleben, 1777, and perhaps Hemming was swayed by Allen's synonymy.

2. Zorilla Oken, [1815–1816], (Lehrb. Naturgeschichte 3 (Zool.): p. xi, index p. 1000 (Zorille)), was made unavailable under the Code by the rejection of Oken's Lehrbuch in Opinion 417 (1956), but Zorilla Isidor Geoffroy Saint, Hilaire, 1826 (Dict. Class. Hist. Nat. 10:215) established for "Le Zorille Buffon T. xii, pl. 41: Mustela zorilla et Viverra zorilla des auteurs systematiques", was still available being described as a subgenus of Mustela.

Investigation of the status of the generic names *Ictonyx* and *Zorilla* by Hemming revealed that a sharp difference of opinion existed between specialists as to the exact identity of these genera and it was this more than anything else which delayed the placing of *Ictonyx* on the Official List.

3. In 1949, Hershkovitz (*Proc. biol. Soc. Washington* **62**:13) maintained that the African polecats currently known as *Ictonyx* Kaup should be called *Zorilla* I. Geoffroy, 1826, and that the Cape Stinkmuishond, currently known as *Ictonyx striatus* (Perry), should be called *Zorilla mapurito* (sic) Müller, 1776.

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Hershkovitz's claim rested (a) on his belief that "le Zorille" of Buffon (1765) could not possibly represent any American mustelid, but clearly represented the Cape Stinkmuishond, and (b) that Zorilla I. Geoffroy and Viverra mapurita Müller, 1776 were both based on "the Zorille" of Buffon, 1765 (Hist. nat. 13: 289, 302–303, pl. 41).

4. In a paper entitled "The technical name of the African Muishond (Genus Ictonyx)", Ellerman and Morrison-Scott, 1953 (Journ. Mammalogy 34: 114-116) completely disagreed with Hershkovitz's diagnosis of Buffon's "Zorille", which to them clearly represented a member of the American genus Spilogale Gray. They reproduced Buffon's plate 41 alongside photographs of skins of the American Spilogale putorius and the African Ictonyx striatus. Both Buffon's plate of "le Zorille", and his very detailed descriptions, they said, quite clearly refer to a Spilogale. "The generic name Zorilla I. Geoffroy, 1826 and the specific name Viverra mapurita Müller, 1776", they said, "therefore both belong to the spotted skunks of America. Zorilla I. Geoffroy, 1826 antedates Spilogale Gray, 1865 and it is realised that this may cause inconvenience. But it is submitted that the right course for those most concerned with the latter genus is not to attempt to export the inconvenience to a place where it does not belong, but to apply to the International Commission on Zoological Nomenclature to have Zorilla I. Geoffroy placed on the Official Index of Rejected and Invalid Generic Names in Zoology ".

5. In August 1953, Hershkovitz replied in a paper entitled, "Zorilla I. Geoffroy and Spilogale Gray, generic names for African and American polecats, respectively" (Journ. Mammalogy 34: 378-382). He wrote: "Apart from an equivocal bibliographic reference in the designation of the [typespecies], nothing in the description of Zorille refers to anything else but African polecats. The name Zorilla cannot be used for American polecats, genus Spilogale. Zorilla I. Geoffroy is monotypic in the original description and its type is designated 'Le Zorille, Buffon., T. xiii, pl. 41; Mustela Zorilla et Viverra zorilla des auteurs systématiques'. This designation is composed of three elements :—

The first is a bibliographic reference to the figure of Buffon's zorille. The depicted animal was regarded by I. Geoffroy as an African polecat. This opinion has been challenged [by Ellerman and Morrison-Scott in (4) above]. In any case, whatever the true or fancied identity of Buffon's zorille, the animals actually described by I. Geoffroy were, and remain, African polecats, then subgenus, now genus Zorilla.

The second element of the [type-species] designation is Mustela zorilla, the specific name actually used by I. Geoffroy for polecats of his subgenus Zorilla, genus Mustela.

Viverra zorilla, [Linnaeus], the third element, appears in the [type-species] designation as an equivalent of Mustela zorilla [E. Geoffroy]. The name Mustela zorilla is traceable to E. Geoffroy who defined it in 1803 (Cat. Mam. Mus. Nat. Hist. Nat. p. 102) ". Hershkovitz went on to emphasize the character of the white edged ears of Buffon's figure which would identify it with the African Muishond. He stated that Cuvier, 1801 (in Azara, Essais Hist. nat. Quad. Paraguay 1: 239, footnote a), was the first reviser to remove Buffon's

"le Zorille" from the faunal list of S. America and to refer it to S. Africa.

Hershkovitz admitted that Lichtenstein, 1838 (Abh. K. Akad. Wiss. Berlin, 1836 : 281) identified Buffon's "le Zorille" as an American spotted skunk.

He wrote: "The controversy has now become sterile. It is the writer's opinion that the only remaining solution is to regard Buffon's *Zorille* as not certainly indentifiable".

6. In 1954 Ellerman & Morrison-Scott (Journ. Mammalogy 35(1): 130-131) replied to Hershkovitz's paper and pointed out that since the only bibliographical reference in the description of Zorilla I. Geoffroy is to Buffon, the identity of the genus must clearly be that of Buffon's plate. They also gave evidence to show that Mustela zorilla E. Geoffroy, 1803, which Hershkovitz 1953 (p. 380) now preferred to regard as the type-species of Zorilla I. Geoffroy, had never been published. The name of the African Stinkmuishond therefore remained Ictonyx striatus (Perry), 1810. They wrote: "We propose to ask the Commission to safeguard the established names Ictonyx Kaup, 1835, and Ictonyx striatus (Perry), 1810, by placing them on the respective Official Lists, and also to relegate the names Zorilla, Mustela zorilla and Viverra zorilla, now hopelessly confused, to the respective Official Indices. At the same time we propose to apply for Spilogale to be placed on the Official List in the sense in which it is currently used in America ".

7. In December 1955 Hershkovitz (Proc. biol. Soc. Washington 68 : 185-192) replied to Ellerman and Morrison-Scott in a paper entitled "Status of the Generic Name Zorilla (Mammalia): Nomenclature by Rule or by Caprice." In this paper Hershkovitz emphasized the fact that Ellerman and Morrison-Scott had ignored I. Geoffroy's description of Zorilla. He pointed out that Mustela zorilla I. Geoffroy, 1826, was the type of Zorilla I. Geoffroy by absolute tautonymy and that the name Mustela zorilla had already been used for the S. African polecats by Cuvier in 1798 (Tabl. Elém. Hist. Nat. : 116). Hershkovitz also gave evidence to show that E. Geoffroy's 1803, Catalogue des Mammifères Mus. Nat. Hist. was actually published although disavowed by the author and his son Isidor. He also declared that Ellerman and Morrison-Scott had accepted some of E. Geoffroy's, 1803, names in their Checklist of Palaearctic and Indian Mammals (1951 : 581).

8. In reply to Hershkovitz, Ellerman and Morrison-Scott, April 1956, sent a paper to the Editor of the *Proceedings of the Biological Society of Washington*, who, however, felt constrained to refuse publication on the grounds that the discussion of the name *Zorilla* had gone on long enough and that space in his journal could be used to greater advantage than in continuing this discussion. Dr. Morrison-Scott therefore asked Mr. Hemming if the rejected paper could be published in the *Bulletin of Zoological Nomenclature*. To complete the argument it is therefore published as follows :---

9. Status of the generic name Zorilla I. Geoffroy, 1826 (Mammalia). By J. R. Ellerman and T. C. S. Morrison-Scott, British Museum (Natural History).

We find ourselves unable to accept the grounds on which Hershkovitz (1955) attempts to rebut our (1953, 1954) contention that Zorilla I. Geoffroy, 1826, does not apply to an African species.

First, Hershkovitz holds that because Geoffroy said that the animal which he described as Zorilla came from Africa, then it must necessarily have come from Africa, and that the name cannot be applied to an alien animal. But the provenance of old cabinet specimens is notoriously unreliable. What, for instance, does Hershkovitz say to such ascriptions as "Habitat in India" for *Rhinoceros bicornis* L., or to *Mustela africana* Desmarest, 1818, "d'Afrique", which has been shown to be a South American species ? There are many such instances.

Secondly, Geoffroy indicated that Plate 41 of Buffon, 1765, *Histoire* Naturelle, volume 13, was his Zorilla (we reproduced this plate in Journal of Mammalogy, 1953, 34:115). Hershkovitz (1949) thought that this plate represented the South African Stinkmuishond, whereas it quite plainly represents the American genus currently known as Spilogale. On the basis of this misidentification Hershkovitz held that Zorilla referred to the African animal.

We pointed out the error, but Hershkovitz (1955), while avoiding this point, at the same time changes his ground and says, in effect, that Buffon's plate is irrelevant to the identification of *Zorilla* Geoffroy. We cannot agree.

Thirdly, we stand by our contention that the Catalogue des Mammifères of Geoffroy "1803" was never published (Hershkovitz, 1953, having made a second attempt to establish Zorilla in Africa by basing it on Mustela zorilla "E. Geoffroy, 1803").

Hershkovitz (1955) asks what we mean by "publication". We mean the word as understood by the International Commission on Zoological Nomenelature, whose amplification of Article 25 of the *Règles* is set out in the *Bulletin* of *Zoological Nomenclature*, 1950, 4:215. We do not mean a "work that has been printed, distributed and consistently cited" (Hershkovitz), unless the distribution has been general. The distribution of the printed proof of the *Catalogue* was to various colleagues.

Over what Geoffroy's son had to say on the subject of his father's *Catalogue* there seems to be some misunderstanding. Hershkovitz (1955) makes the son say that his father "renounced" the publication of the book. But the words the son used were "renonca à", which is quite a different thing. The English "renounced" suggests that the publication had actually taken place, but the French expression means that E. Geoffroy abandoned the idea of publishing. The fact that the son later included the *Catalogue* in a general list of works "publiés" by his father cannot be held to be a critical judgement and to override what the son said when discussing the *Catalogue* specifically.

Hershkovitz (1955: 188) seems to doubt whether we have in fact ever seen a copy of the *Catalogue*, on the rather curious ground that we do not specifically say that we have. It did not occur to us that this would be so remarkable as to call for mention, but we can assure Dr. Hershkovitz that we have seen the work: in fact the B.M. copy has some interesting notes by Sherborn on the fly leaf.

We are also rather astonished that there should apparently have been any difficulty about identifying our "undocumented reference to Sherborn". We took it that the *Index Animalium*, the bibliography thereof, would be understood. In this work Sherborn says that the *Catalogue* was a mere "M.S.".

It does appear that there may be some confusion between the term "M.S." as used in this country and in America, since Hershkovitz makes a point of the fact that the *Catalogue* was printed. But Sherborn used the term "M.S.", as we do, to include holograph manuscript, typed manuscript, printed manuscript, in fact all stages up to publication.

Anyway, Sherborn, a bibliographer with a reputation second to none, held the same view as we do, namely that E. Geoffroy's *Catalogue des Mammifères* was never published, though part of the M.S. reached the printed stage, and was subsequently distributed to colleagues.

May we digress for a moment to say that in our *Palaearctic and Indian* Mammals (p. 581) we quoted Mus alexandrinus as of Geoffroy 1803, instead of Desmarest 1819, Nouv. Dict. Hist. Nat. **29**: 47. We regret this slip, which we had corrected in the case of Mus cahirinus, but omitted to do for alexandrinus.

We have gone into the question of the publication of "E. Geoffroy, 1803" at some length, partly because Hershkovitz has brought it into the argument about *Zorilla*, but also because the remarks which he makes on the subject (1955) may well mislead mammalogists about the book in general.

But in so far as the question of *Zorilla* is concerned, the matter of Geoffroy's *Catalogue* is perhaps now irrelevant since Hershkovitz (1955) has changed his mind once more about the type species of *Zorilla*.

Hershkovitz has given us three rulings on the type-species of Zorilla. Originally (1949) it was Viverra mapurito Müller, 1776. This having been shown to be a Spilogale he then (1953) switched to Mustela zorilla " E. Geoff. 1803". Now (1955) he has it as Mustela zorilla G. Cuvier, 1798, Tabl. Elém. Hist. Nat. 116, which he says is the "original description" of " le zorille, ou putois du Cap" and represents the polecats of the Cape of Good Hope.

But the entry in Cuvier, 1798, is not the original description of zorilla. Cuvier himself quotes "Viverra zorilla Linn.". Presumably Hershkovitz was unable to trace this reference. It should have been given as "Gmelin, 1788, in the 13th edition of Linnaeus, Systema Naturae, p. 88", where Viverra zorilla is the name given to the species ("habitat in America australi") which is depicted by Schreber in his Säugthiere, volume 3, Pl. 123, and by Buffon in his Hist. Nat., volume 13, Pl. 41. So we are back again to the species currently known as Spilogale.

We are much obliged to Dr. Hershkovitz for going to all this trouble to confirm our opinion that *Zorilla* I. Geoffroy, 1826, refers to the genus currently known as *Spilogale*.

We also confirm that we stand for nomenclature by rule—though we must add that we mean the rule of the International Commission on Zoological Nomenclature, to whom we have already forwarded our proposals referred to in the *Journal of Mammalogy*, 1954, **35**: 131, for the preservation of nomenclatural stability, and current usage, by rule.

PRESENT POSITION

In view of the fact that *Spilogale* Gray, 1865, has been placed on the Official List of Generic Names in Zoology in Opinion 384, p. 130 (1956) the name *Zorilla* I. Geoffroy, 1826, can no longer be applied validly to this American

taxon even if the well documented testimony of Ellerman and Morrison-Scott is accepted. Nor should it be used for the S. African Stinkmuishond currently known as *Ictonyx striatus* (Perry), 1810, as Hershkovitz contends, since, *Zorilla* I. Geoffroy is virtually a nomen oblitum. According to the New Code Article 23b, a name that has remained unused for more than 50 years is to be considered a forgotten name and is not to be used unless the Commission so directs. After 1960, a zoologist who discovers such a name is to refer it to the Commission. It is not clear whether this rule is retroactive or not. The wording "after 1960" suggests that a zoologist such as Hershkovitz could use such a name before 1960. Certainly the name *Zorilla* had not been used by mammalogists for more than 50 years before it was reintroduced by Hershkovitz in 1949.

If Zorilla cannot be regarded as a nomen oblitum then it must be suppressed under the plenary powers in order to resolve the long argument over the name. It is believed that this solution would be satisfactory to both parties since Hershkovitz himself admitted (see (5)) above that Buffon's Zorille was not certainly identifiable. Such action would also preserve the traditional use of *Ictonyx* for the African polecats.

11. The International Commission on Zoological Nomenclature is requested to take the following action :--

- (1) to use its plenary powers to suppress the following names for the purposes of the Law of Priority but not for those of the Law of Homonymy:
 - (a) the generic name Zorilla I. Geoffroy, 1826;
 - (b) the specific names zorilla Gmelin, 1788, as published in the binomen Viverra zorilla ; zorilla Cuvier, 1798, as published in the binomen Mustela zorilla ;
- (2) to place the generic name Ictonyx Kaup, 1835 (gender : masculine) type-species, by monotypy, Ictonyx capensis Kaup, 1835 (a subjective synonym of Bradypus striatus Perry, 1810) on the Official List of Generic Names in Zoology;
- (3) to place the specific name striatus Perry, 1810, as published in the binomen Bradypus striatus, on the Official List of Specific Names in Zoology;
- (4) to place the generic name Zorilla I. Geoffroy, 1826 (suppressed under the plenary powers in (1) above) on the Official Index of Rejected and Invalid Generic Names in Zoology;
- (5) to place the following specific names on the Official Index of Rejected and Invalid Generic Names in Zoology :
 - (a) zorilla Gmelin, 1788, as published in the binomen Viverra zorilla (suppressed under the plenary powers in (1) above);
 (b) zorilla (1) above);
 - (b) zorilla Cuvier, 1798, as published in the binomen Mustela zorilla (suppressed under the plenary powers in (1) above);
- (6) to place on the Official Index of Rejected and Invalid Works in Zoological Nomenclature : Geoffroy (E.) 1803, Catalogue des Mammifères des Mus. National d'Hist. Nat. Paris (rejected for nomenclatorial purposes because it was never published under the requirements of the International Code, Chapter III).